Permit to Operate

FACILITY: S-498 EXPIRATION DATE: 11/30/200

LEGAL OWNER OR OPERATOR: AMERICAN YEAST CORPORATION

MAILING ADDRESS: 5455 DISTRICT BLVD

BAKERSFIELD, CA 93313

FACILITY LOCATION: 5455 DISTRICT BLVD @ ARMSTRONG

BAKERSIFELD, CA

FACILITY DESCRIPTION: YEAST PRODUCTION

The Facility to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

The Permit to Opertae remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

<u>DAVID L. CROW</u>

Executive Director / APCO

Seyed Sadredin

Diector of Permit Services

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-498-0-1 **EXPIRATION DATE:** 11/30/2005

EQUIPMENT DECRIPTION:

- 1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)], [Federally Enforceable Through Title V]
- 2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)], [Federally Enforceable Through Title V]
- 3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0], [Federally Enforceable Through Title V]
- 4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020. [District Rule 2010, 3.0 and 4.0; and 2020], [Federally Enforceable Through Title V]
- 5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.9.1 and 9.13.1], [Federally Enforceable Through Title V]
- 6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031], [Federally Enforceable Through Title V]
- 7. Every application for a permit required under Rule 2010 (Permits Required) shall be filed in a manner and form prescribed by the District. [District Rule 2040], [Federally Enforceable Through Title V]
- 8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.5.1], [Federally Enforceable Through Title V]
- 9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
- 10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.6.1], [Federally Enforceable Through Title V]
- 11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 [District Rules 2520, 9.6.2 and 1100, 7.0], [Federally Enforceable Through Title V]
- 12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit . [District Rule 2520, 9.8], [Federally Enforceable Through Title V]

- 13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.9.1], [Federally Enforceable Through Title V]
- 14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.9.3], [Federally Enforceable Through Title V]
- 15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.9.4], [Federally Enforceable Through Title V]
- 16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.9.5], [Federally Enforceable Through Title V]
- 17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.10], [Federally Enforceable Through Title V]
- 18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.14.2.1], [Federally Enforceable Through Title V]
- 19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.14.2.2], [Federally Enforceable Through Title V]
- 20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.14.2.3], [Federally Enforceable Through Title V]
- 21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.14.2.4], [Federally Enforceable Through Title V]
- 22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101, by using EPA method 9. If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)], [Federally Enforceable Through Title V]
- 23. No person shall supply, sell, solicit or apply any architectural coating, except specialty coatings, that contains more than 250 grams of VOC per liter of coating (less water and exempt compounds, and excluding any colorant added to tint bases), or manufacture, blend, or repackage such coating with more than 250 grams of VOC per liter (less water and exempt compounds, and excluding any colorant added to tint bases) for use within the District. [District Rule 4601, 5.1], [Federally Enforceable Through Title V]
- 24. Specialty Coating Limitations: No person shall apply, sell, solicit, or offer for sale any architectural coating listed in the Tables of Standards (District Rule 4601, Table 1 and Table 2), nor manufacture, blend, or repackage such coating for use within the District, which contains VOCs in excess of the specified limits after the corresponding date listed in Table 1 (grams of VOC per liter of coating as applied less water and exempt compounds, excluding any colorant added to tint bases) and in Table 2 (grams of VOC per liter of material), except as provided in Section 5.3 of Rule 4601. [District Rule 4601, 5.2], [Federally Enforceable Through Title V]
- 25. All VOC-containing materials shall be stored in closed containers when not in use. In use includes, but is not limited to: being accessed, filled, emptied, maintained or repaired. [District Rule 4601, 5.4], [Federally Enforceable Through Title V]
- A person shall not use VOCs for the cleanup of spray equipment unless equipment for collection of the cleaning compounds and minimizing its evaporation to the atmosphere is used. [District Rule 4601, 5.5], [Federally Enforceable Through Title V]
- 27. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.2. [District Rule 4601, 6.1 and 6.2], [Federally Enforceable Through Title V]
- 28. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.14.1 and 10.0], [Federally Enforceable Through Title V]
- 29. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F], [Federally Enforceable Through Title V]
- 30. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart F, [40 CFR Part 82, Subpart F], [Federally Enforceable Through Title V]

- 31. Disturbances of soil related to any construction, demolition, excavation, extraction, or water mining activities shall comply with the requirements for fugitive dust control in SJVUAPCD District Rule 8020 unless specifically exempted under section 4 of Rule 8020. [District Rule 8020], [Federally Enforceable Through Title V]
- 32. Outdoor handling and storage of any bulk material which emits dust shall comply with the requirements of SJVUAPCD Rule 8030, unless specifically exempted under section 4 of Rule 8030. [District Rule 8030], [Federally Enforceable Through Title V]
- 33. Any paved road over 3 miles in length, and any unpaved roads over half a mile in length, constructed after December 10, 1993 shall use the design criteria and dust control measures of, and comply with the administrative requirements of, SJVUAPCD Rule 8060 unless specifically exempted under section 4 of Rule 8060. [District Rule 8060], [Federally Enforceable Through Title V]
- 34. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M], [Federally Enforceable Through Title V]
- 35. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.17], [Federally Enforceable Through Title V]
- 36. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2], [Federally Enforceable Through Title V]
- 37. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permit shall apply. [District Rule 2520, 9.1.1], [Federally Enforceable Through Title V]
- 38. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 39. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92);2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (12/17/92); 4601, sections 5.1, 5.2, 5.4, 5.5, 6.1, and 6.2 (9/17/97); 8020 (4/25/96); 8030 (4/25/96); 8060 (4/25/96); A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 40. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 41. Facility shall comply with all applicable requirements regarding preparation and implementation of a risk management plan (RMP) by August 31, 1999, and shall abide by all applicable sections of 40 CFR Part 68. [40 CFR 68], [Federally Enforceable Through Title V]
- 42. On March 30, 2001, the initial Title V permit was issued, the reporting period of the Report of Required Monitoring and the Compliance Certification Report are based upon this initial permit issuance date, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days of the end of reporting period. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-498-1-1 **EXPIRATION DATE:** 11/30/2005

EQUIPMENT DECRIPTION:

FERMENTATION PROCESS INCLUDING: 6 MOLASSES TANKS (1,793,100 GALLONS), 2 MASH TANKS (20,000 GALLONS), 3 FERMENTATION TANKS (81,600 GALLONS), 3 SLUDGE REWORK TANKS (6,750 GALLONS)

- 1. True vapor pressure of any organic liquid introduced or stored in the tank shall not exceed 1.5 psia at liquid temperature. [District Rule 4623, 2.0 and 2010], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the organic liquid stored in the tanks at least once per year in accordance with methods described in District Rule 4623, 6.2.2 (Amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of organic liquid entering the tank. [District Rule 4623, 6.2 and 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92) for a period of 5 years and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2, 9.5.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-498-5-5 **EXPIRATION DATE:** 11/30/2005

EQUIPMENT DECRIPTION:

AQUEOUS AMMONIA SYSTEM INCLUDING 21,000 GALLON STORAGE TANK WITH WATER SEAL

- 1. Operation shall include 15,325 gallon anhydrous ammonia storage tank, 8" dia. by 3' long ammonia reactor vessel, 20" dia. by 10' long heat exchanger shell tube, 800 gallon vapor vent tank and 1hp aqua ammonia return pump. [District NSR Rule], [Federally Enforceable Through Title V]
- 2. Operation shall include compressed air piping to aqua ammonia storage tank and two aqua ammonia strainers with backflush lines between aqua ammonia storage tank and fermenters. [District NSR Rule], [Federally Enforceable Through Title V]
- Aqua ammonia tanks shall be equipped with pressure relief valve to prevent pressure from exceeding 25 psig. [District NSR Rule], [Federally
 Enforceable Through Title V]
- 4. Anhydrous ammonia tank shall be equipped with pressure relief valve to prevent pressure from exceeding 265 psig. [District NSR Rule], [Federally Enforceable Through Title V]
- 5. Ammonia vapors shall be vented to aqueous ammonia vapor vent tank, except during emergency pressure relief venting when the tank pressure exceeds 265 psig. [District NSR Rule], [Federally Enforceable Through Title V]
- 6. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants and noxious odors into the atmosphere. [District Rule 4102]
- Aqueous ammonia supply line and vapor return line connections to supply truck shall be leak free and there shall be no noxious odors
 emmitted from these lines during the transfer of aqueous ammonia from supply truck to storage tank. [District Rule 4102]
- 8. Leaks are defined as the dripping of liquid ammonia at the rate of more than three (3) drops per minute or 20 ppmv as measured by a Draeger tube. [District NSR Rule], [Federally Enforceable Through Title V]
- 9. All detected liquid and vapor leaks shall be repaired immediately. [District NSR Rule], [Federally Enforceable Through Title V]
- 10. Operator shall conduct annual inspections on ammonia system for leaks that may be detected by sight, sound, or smell. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-498-6-5 **EXPIRATION DATE:** 11/30/2005

EQUIPMENT DECRIPTION:

20,112,000 BTU/HR NATURAL GAS/OIL FIRED CLEAVER BROOKS, MODEL DELTA WT400XA-5, BOILER EQUIPPED WITH COEN LOW-NOX BURNERS.

- 1. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(Last Amended December 19,1993). [District Rule 1081, and Kern County Rules 108.1], [Federally Enforceable Through Title V]
- 2. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
- 4. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]
- 5. Source testing shall be performed using EPA Method 5 while firing on residual oil (including crude or topped crude) to demonstrate compliance with PM emission limits. Source testing shall be performed within 60 days of firing on residual oil unless such testing has been performed within the 12 month period prior to firing on said oil and the test results showed compliance with PM emission limits of this permit. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 6. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or on diesel fuel not exceeding 0.5% sulfur by weight; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.4.2 and District Rule 4301, 5.2.1], [Federally Enforceable Through Title V]
- 7. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 8. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculate emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 9. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 10. If the unit is fired on noncertified liquid fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the liquid fuel being fired in the unit shall be determined using ASTM D 2880. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 11. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 240 or D 2382 for liquid hydrocarbon fuels; ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.4.2, and 4305, 6.2.1], [Federally Enforceable Through Title V]
- 12. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas or diesel fuel not exceeding 0.5% sulfur by weight; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels or 3.0% by weight for residual oil (including crude or topped crude); or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

- 13. Annual source testing shall be performed for NOx (ppmv) according to EPA Method 7E (or ARB Method 100), stack gas oxygen by EPA Method 3 or 3A (or ARB Method 100), CO (ppmv) by EPA Method 10 (or ARB Method 100), and NOx emission rate (heat input basis) by EPA Method 19. Gaseous fired units demonstrating compliance on 2 consecutive annual tests shall be tested not less than once every 36 months. Annual testing shall resume if any such test fails to show compliance. [District Rule 4305, 6.2.2, 6.2.4-7, & 6.3.1 and 2520, 9.4.2], [Federally Enforceable Through Title V]
- 14. Nitrogen oxide (NOx) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO2/MMBtu of heat input (hhv). [District Rule 4305 and 2520, 9.4.2], [Federally Enforceable Through Title V]
- 15. Nitrogen oxide (NOx) emissions shall not exceed: A) 0.036 lb NOx/MMBtu or 30 ppmv when unit is gaseous fuel fired, B) 0.052 lb NOx/MMBtu or 40 ppmv when unit is liquid fuel fired. [District Rules 2520, 9.4.2 and/or District Rule 4305, 5.1 and the subsumed District Rule 4301 and Kern County Rules 408], [Federally Enforceable Through Title V]
- 16. NOx requirements shall not apply during natural gas curtailment to units burning liquid fuel that are normally fired with gaseous fuel. This exemption is limited to 336 cumulative hours of operation per calendar year excluding equipment testing not to exceed 48 hours per calendar year. For any unit so exempted, cumulative annual hours of operation on each liquid during curtailment and during testing shall be monitored and recorded. [District Rule 4305, and 2520, 9.4.2], [Federally Enforceable Through Title V]
- 17. Unit shall be fired on natural gas or fuel oil and equipped with non-resettable fuel flow meters. [District Rule 4305 and District NSR Rule], [Federally Enforceable Through Title V]
- 18. The boiler and appurtenances, including fuel oil preheat and atomization equipment shall be operated and maintained as intended by manufacturer. [District NSR Rule], [Federally Enforceable Through Title V]
- 19. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801], [Federally Enforceable Through Title V]
- 20. This permit unit shall not operate while S-498-8 is operating. [District NSR Rule], [Federally Enforceable Through Title V]
- 21. Fuel oil sulfur content shall not exceed 1.2% by weight. [District NSR Rule], [Federally Enforceable Through Title V]
- 22. Total facility fuel oil consumption shall not exceed 1,417 gallons per day. Operator shall maintain a record of the daily fuel oil consumption. [District Rule 2520, 9.4.2 and District NSR Rule], [Federally Enforceable Through Title V]
- 23. CO emissions shall not exceed 400 ppmv calculated at 3% O2, or 0.317 lb/MMBtu for oil firing and 0.300 lb/MMBtu for gas firing. [District Rule 4305 and District NSR Rule], [Federally Enforceable Through Title V]
- 24. Combined daily emissions from permit units #S-498-6 and '-8 shall not exceed the following: SOx (as SO2): 275.00 lb/day; and NOx (as NO2): 107.52 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]
- 25. The stack concentration of NOx (as NO2), CO, and O2 shall be measured at least on a monthly basis, using District approved portable analyzers. [District Rule 2520, 9.4.2 and 4305], [Federally Enforceable Through Title V]
- 26. The permittee shall maintain records of the date and time of NOx, CO, and O2 measurements, the measured NO2 and CO concentrations corrected to 3% O2, and the O2 concentration. The records shall also include a description of any corrective action taken to maintain the emissions in the acceptable range. These records shall be retained at the facility for a period of no less than five years and shall be made readily available for District inspection upon request. [District Rules 1070, 2520, 9.5.2 and 4305], [Federally Enforceable Through Title V]
- 27. If the NOx and CO concentrations, as measured by the portable analyzer, exceed the allowable emission rate, the permittee or third party shall notify the District and take corrective action as soon as possible, but no longer than one (1) hour after detection. If the portable analyzer readings continue to exceed for more than one hour the allowable emission rate, the permittee shall conduct an emissions test within 60 days, utilizing District-approved test methods, to demonstrate compliance with the applicable emission limits. [District Rule 2520, 9.4.2 and 4305], [Federally Enforceable Through Title V]
- 28. Within 60 days of switching to fuel oil, source testing to measure NOx and CO emissions shall be conducted, if testing has not been performed within the last year. [District Rules 4305, and 2520, 9.4.2], [Federally Enforceable Through Title V]
- 29. Source test results from a representative unit that is identical to this unit, in terms of rated capacity, operational conditions, fuel used, and control method, as approved by the APCO, will satisfy the NOx and CO source testing requirement. [District Rules 4305, and 2520, 9.4.2], [Federally Enforceable Through Title V]
- 30. The following test methods for sulfur content shall be used: fuel gas sulfur content ASTM D3246 or double GC for H2S and mercaptans, and fuel oil sulfur content ASTM D4294. [District NSR Rule and District Rule 1081], [Federally Enforceable Through Title V]
- 31. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081], [Federally Enforceable Through Title V]
- 32. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081], [Federally Enforceable Through Title V]

- 33. Permittee shall test sulfur content of fuel oil no less than once annually, in years when fuel oil is used, and keep records of the results. [District NSR Rule], [Federally Enforceable Through Title V]
- 34. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 35. Compliance testing for oil fired NOx and CO limits shall be conducted in any calendar year in which the boiler operates more than 336 cumulative hours plus 48 hours per calendar year for equipment testing. [District Rule 4305, and 2520, 9.4.2], [Federally Enforceable Through Title V]
- 36. NOx, and CO emissions shall be measured with annual source testing conducted by independent testing laboratory and shall be witnessed or authorized by the District. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 37. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 forty-minute test runs for NOx and CO. This mean shall be multiplied by the appropriate factor. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 38. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rule 4201, 4301, and 4305. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 39. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 407 and SJVUAPCD Rule 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-498-8-3 **EXPIRATION DATE:** 11/30/2005

EQUIPMENT DECRIPTION:

12.6 MMBTU/HR NATURAL GAS/OIL-FIRED JOHNSTON MODEL 524 AHG BOILER

- 1. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(Last Amended December 19,1993). [District Rule 1081, and Kern County Rules 108.1], [Federally Enforceable Through Title V]
- 2. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
- 4. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]
- 5. Source testing shall be performed using EPA Method 5 while firing on residual oil (including crude or topped crude) to demonstrate compliance with PM emission limits. Source testing shall be performed within 60 days of firing on residual oil unless such testing has been performed within the 12 month period prior to firing on said oil and the test results showed compliance with PM emission limits of this permit. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 6. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas or on diesel fuel not exceeding 0.5% sulfur by weight; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.4.2 and District Rule 4301, 5.2.1], [Federally Enforceable Through Title V]
- 7. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 8. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculate emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 9. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 10. If the unit is fired on noncertified liquid fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the liquid fuel being fired in the unit shall be determined using ASTM D 2880. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 11. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 240 or D 2382 for liquid hydrocarbon fuels; ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.4.2, and 4305, 6.2.1], [Federally Enforceable Through Title V]
- 12. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas or diesel fuel not exceeding 0.5% sulfur by weight; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels or 3.0% by weight for residual oil (including crude or topped crude); or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 13. Sulfur compound emissions shall not exceed 2,000 ppmv as SO2. [District Rule 4801], [Federally Enforceable Through Title V]

- 14. Unit shall be fired on natural gas or fuel oil and equipped with non-resettable fuel flow meters. [District NSR Rule and 4305], [Federally Enforceable Through Title V]
- 15. The boiler and appurtenances, including fuel oil preheat and atomization equipment shall be operated and maintained as intended by manufacturer. [District NSR Rule], [Federally Enforceable Through Title V]
- 16. This permit unit shall not operate while S-498-6 is operating. [District NSR Rule and District Rule 4305], [Federally Enforceable Through Title V]
- 17. Fuel oil sulfur content shall not exceed 1.2% by weight. [District NSR Rule], [Federally Enforceable Through Title V]
- 18. Total facility fuel oil consumption shall not exceed 1,417 gallons per day. [District NSR Rule], [Federally Enforceable Through Title V]
- 19. Fuel usage for this unit shall be less than 90 billion BTU per year. [District NSR Rule and 4305], [Federally Enforceable Through Title V]
- 20. Combined daily emissions from permit units #S-498-6 and '-8 shall not exceed the following: SOx (as SO2): 275.00 lb/day; and NOx (as NO2): 107.52 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]
- 21. Unit shall be tuned at least once each calendar year in which it operates by a qualified technician in accordance with Rule 4304. [District Rule 4305]
- 22. Permittee shall maintain accurate records of daily, monthly, and annual fuel use, fuel oil sulfur content, boiler usage, and dates tuning performed for a period of five years and shall make such records readily available for District inspection upon request. [District NSR Rule and District Rule 2520, 9.5.2 and 4305], [Federally Enforceable Through Title V]
- 23. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rule 4201, 4301 and 4305. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 24. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 407 and SJVUAPCD Rule 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-498-9-1 **EXPIRATION DATE:** 11/30/2005

EQUIPMENT DECRIPTION:

116,000 GALLON YEAST STORAGE, RECEIVING AND CLEANING OPERATION

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rule 4623, 2.0 and 2010], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the organic liquid stored in the tanks at least once per year in accordance with methods described in District Rule 4623, 6.2.2 (Amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of organic liquid entering the tank. [District Rule 4623, 6.2 and 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92) for a period of 5 years and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2, 9.5.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-498-10-2 **EXPIRATION DATE:** 11/30/2005

EQUIPMENT DECRIPTION:

650 HP WASTE WATER DISPOSAL OPERATION INCLUDING 600,000 GALLON LIQUID NUTRIENT OPEN TOPPED TANK, 52,000 GALLON FIXED ROOF SOIL AMENDMENT TANK, IRRIGATION SYSTEM, 400 ACRE APPLICATION SITE, AND TAIL WATER RUN-OFF AND COLLECTION SYSTEM

- 1. Maximum retention time for wastewater in either tank shall not exceed 24 hours. [District NSR Rule], [Federally Enforceable Through Title V]
- Wastewater shall be evenly distributed by flood irrigation on 400 acre application site only. [District NSR Rule], [Federally Enforceable Through Title V]
- One acre sub-plots shall be suitably dry condition prior to application of additional wastewater. [District NSR Rule], [Federally Enforceable Through Title V]
- 4. Land disposal site shall be harrowed during normal crop rotation annually to prevent clogging of soil. [District NSR Rule], [Federally Enforceable Through Title V]
- 5. Tail water run-off collection and return system shall be maintained to prevent blockage. [District NSR Rule], [Federally Enforceable Through Title V]
- 6. There shall be no visible standing water at any application site for more than 48 hours. [District NSR Rule], [Federally Enforceable Through Title V]
- 7. Wastewater distribution shall be managed such that tail water run-off is minimized. [District NSR Rule], [Federally Enforceable Through Title V]
- 8. If odors exist, American Yeast Corporation shall aerate all wastewater as necessary to prevent odors. [District Rule 4102]
- 9. The permittee shall keep accurate records of the retention time for wastewater and the volume of effluent discharged, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 1070 and 2520, 9.4.2 and 9.5.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-498-11-2 **EXPIRATION DATE:** 11/30/2005

EQUIPMENT DECRIPTION:YEAST TRADE FERMENTOR #4

- 1. Fermentor exhaust shall be equipped with a continuously operating total hydrocarbon flame ionization detector (THC FID) calibrated with propane. [District NSR Rule], [Federally Enforceable Through Title V]
- THC FID shall be used to monitor VOC concentration in the fermentor exhaust to allow control of fermentation process to minimize VOC
 emissions. The THC FID is not a continuous emission monitor as defined in District Rule 1080. [District NSR Rule], [Federally Enforceable
 Through Title V]
- 3. VOC emissions rate (expressed as propane) shall not exceed 10 lb/ton of yeast produced in any day and VOC emissions in any calendar month shall not exceed 1.25 lb/ton of yeast produced. [District NSR Rule], [Federally Enforceable Through Title V]
- 4. VOC lb/ton (calendar month average) shall be calculated as follows. VOC lb/ton (calendar month average) = Sum of the VOC emissions per ton of yeast produced for each batch (VOC lb/ton-batch) during the calendar month / number of batches produced during the calendar month, using VOC lb/ton-batch = Sum of the hourly VOC emission rate (VOC lb/hr) during a batch / tons yeast produced in that batch and VOC lb/hr = (average VOC ppmv during hour)x(air flow rate into fermentor during hour)x(44 lbmol propane/385.3 scf)x(1E-6). In determining the tons of yeast produced, assume the yeast produced is equal to 30% of the liquid yeast produced. [District NSR Rule], [Federally Enforceable Through Title V]
- 5. VOC emission rate shall not exceed 500 lb/day and 18,750 lb/year. [District NSR Rule], [Federally Enforceable Through Title V]
- 6. Permittee shall maintain, for a period of at least five years, records of daily and annual yeast production from this unit, VOC emissions in pounds of VOC emitted per ton of yeast produced for each day and each calendar month, and daily and annual VOC emissions. Such records shall be made readily available for District inspection upon request. [District NSR Rule and 2520, 9.5.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-498-12-1 **EXPIRATION DATE:** 11/30/2005

EQUIPMENT DECRIPTION:

50,000 GAL YEAST FERMENTATION WASTEWATER BIODEGRADATION/STORAGE TANK

- 1. True vapor pressure of any organic liquid introduced or stored in the tank shall not exceed 1.5 psia at liquid temperature. [District Rule 4623, 2.0 and 2010], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the organic liquid stored in the tanks at least once per year in accordance with methods described in District Rule 4623, 6.2.2 (Amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of organic liquid entering the tank. [District Rule 4623, 6.2 and 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92) [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. Wastewater VOC concentration shall not exceed 0.482 g/liter. [District NSR Rule], [Federally Enforceable Through Title V]
- 5. Wastewater throughput shall not exceed 100,000 gal/day (monthly average). [District NSR Rule], [Federally Enforceable Through Title V]
- 6. The following test method shall be used: EPA method 8240. [District Rule 1081], [Federally Enforceable Through Title V]
- 7. Permittee shall maintain monthly records of wastewater VOC concentration and tank throughput for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 1070 and 2520, 9.5.2], [Federally Enforceable Through Title V]